

### **REMARKS/ARGUMENT**

Claim 18-23 stand allowed. Applicants appreciate the indication from the Examiner that Claims 2-5 and 12-15 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims but believe that Claims 2-5 and 12-15 are allowable in their present form in light of the below arguments.

1) Claims 1 and 6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (US 5,513,387) in view of Stoter et al (US 20030026363). Applicants respectfully traverse this rejection as follows:

In proceedings before the Patent and Trademark Office, "the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art". In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citing In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). "The Examiner can satisfy this burden **only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references**", In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)(citing In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988)(citing In re Lalu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)).

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Independent Claim 1, requires and positively recites, an analog speed-up and gain control system, comprising: "a **speed-up circuit** that receives a gain control input signal

from associated digital circuitry **and generates a speed-up control signal in response to changes in the gain control input signal**” and “delay circuitry that receives the gain control input signal and **outputs a delayed gain control signal according to the gain control input signal**”.

In contrast, Saito discloses a plurality of automatic gain control means in which the gain control signal is timely issued and NOT delayed. The unique aspect of Saito is that the gain resulting from the gain control is extended or HELD (col. 8, lines 23-25) – NOT “delay circuitry that receives the gain control input signal and **outputs a delayed gain control signal according to the gain control input signal**”, as required by Claim 1. Moreover, please note lines 25-30 where it mentions that there is a “predetermined time delay AFTER the gain control operation”.

The Examiner admits that Saito does not teach or suggest a gain control circuit that is a speed up circuit (Office Action dated February 23, 2005, page 2, lines 15-17). As such, Saito fails to teach or suggest, “a **speed-up circuit** that receives a gain control input signal from associated digital circuitry **and generates a speed-up control signal in response to changes in the gain control input signal**”, as further required by Claim 1.

The Examiner relies upon Stoter for the teaching of a control circuit that is a speed up circuit. Assuming, arguendo, that Stoter discloses a control circuit that is a speed up circuit, Stoter does not further teach or suggest the above identified deficiency of the Saito reference, namely, “delay circuitry that receives the gain control input signal and **outputs a delayed gain control signal according to the gain control input signal**”, as required by Claim 1. As such, any combination of Saito and Stoter fails to teach or suggest all of the elements of Claim 1. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 1 is overcome.

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. **The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.** In re Gordon, 733 F.2d at 902, 221 USPQ at 1127. Moreover, **it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious.** In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985).

Claim 6 stands allowable as depending (directly or indirectly) from allowable Claim 1 and including further limitations not taught or suggested by the references of record.

Claim 6 further defines the system of claim 1 in combination with a filter network, the filter network comprising at least one variable gain amplifier operative to amplify an input signal according to a gain selected based on the delayed gain control signal. In addition to the reasons previously set forth in support of the allowance of Claim 1, col. 6, lines 36-56 of Saito says nothing whatsoever about RF amplifier 2 being part of a filter network, as suggested by the Examiner. The Examiner's determination is supposition not supported by fact. As such, the 35 U.S.C. 103(a) rejection is overcome.

2) Claims 7-10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (US 5,513,387) in view of Stoter et al (US 20030026363) further in view of Rahman et al (US 6,560,447). Applicants respectfully traverse this rejection as follows:

In proceedings before the Patent and Trademark Office, “the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art”. In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citing In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). “The Examiner can satisfy this burden **only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references**”, In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)(citing In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988)(citing In re Lalu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)).

Claim 7 further defines the combination of claim 6, the filter network further comprising at least one filter operatively coupled to receive the amplified signal from the amplifier, the associated filter having a filtering characteristic that varies based on the speed-up control signal.

Claim 6, from which Claim 7 depends, further defines the system of claim 1 in combination with a filter network, the filter network comprising at least one variable gain amplifier operative to amplify an input signal according to a gain selected based on the delayed gain control signal.

Independent Claim 1, from which Claim 6 depends, requires and positively recites, an analog speed-up and gain control system, comprising: “a **speed-up circuit** that receives a gain control input signal from associated digital circuitry **and generates a speed-up control signal in response to changes in the gain control input signal**” and “delay circuitry that receives the gain control input signal and **outputs a delayed gain control signal according to the gain control input signal**”.

In contrast, Saito discloses a plurality of automatic gain control means in which the gain control signal is timely issued and NOT delayed. The unique aspect of Saito is that

the gain resulting from the gain control is extended or HELD (col. 8, lines 23-25) – NOT “delay circuitry that receives the gain control input signal and **outputs a delayed gain control signal according to the gain control input signal**”, as required by Claim 1. Moreover, please note lines 25-30 where it mentions that there is a “predetermined time delay AFTER the gain control operation”.

The Examiner admits that Saito does not teach or suggest a gain control circuit that is a speed up circuit (Office Action dated February 23, 2005, page 2, lines 15-17). As such, Saito fails to teach or suggest, “a **speed-up circuit** that receives a gain control input signal from associated digital circuitry **and generates a speed-up control signal in response to changes in the gain control input signal**”, as further required by Claim 1.

The Examiner relies upon Stoter for the teaching of a control circuit that is a speed up circuit. Assuming, arguendo, that Stoter discloses a control circuit that is a speed up circuit, Stoter does not further teach or suggest the above identified deficiency of the Saito reference, namely, “delay circuitry that receives the gain control input signal and **outputs a delayed gain control signal according to the gain control input signal**”, as required by Claim 1. As such, any combination of Saito and Stoter fails to teach or suggest all of the elements of Claim 1. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 1 is overcome.

Claim 7 stands allowable for the same reasons set forth above for the allowance of Claims 1 and 6. Moreover, the combination of references fails to teach or suggest the additional elements of Claim 7 in combination with the elements of Claims 1 and 6. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 7 is overcome.

Claim 8 further defines the combination of claim 7, the filter comprising a high-pass filter. In addition to the reasons previously set forth in support of the allowance of

Claims 1, 6 and 7, the cited references alone, or in combination, fail to teach or suggest this additional limitation in combination with the previously discussed limitations of Claim 7.

Claim 9 further defines the combination of claim 8, the filtering characteristic comprising a corner frequency of the high-pass filter. In addition to the reasons previously set forth in support of the allowance of Claims 1, 6, 7 and 8, the cited references alone, or in combination, fail to teach or suggest this additional limitation in combination with the previously discussed limitations of Claim 8.

Claim 10 further defines the combination of claim 6 implemented as an analog section of a direct conversion receiver. In addition to the reasons previously set forth in support of the allowance of Claims 1 and 6, the cited references alone, or in combination, fail to teach or suggest this additional limitation in combination with the previously discussed limitations of Claim 6.

3) Claims 11 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (US 5,513,387) in view of Medvid et al (US 6,741,844) further in view of Stoter et al (US 20030026353). Applicant respectfully traverses this rejection, as set forth below.

In proceedings before the Patent and Trademark Office, “the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art”. In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citing In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). “The Examiner can satisfy this burden **only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references**”, In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir.



1992)(citing In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988)(citing In re Lalu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)).

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Independent Claim 11 requires and positively recites, a direct conversion receiver, comprising: "a variable gain amplifier operative to amplify an input signal derived from a radio frequency (RF) signal, the gain of the amplifier being adjustable based on a gain control signal from an associated digital system", "a filter operative to filter an amplified signal of the amplifier and provide a filtered output signal" and "a speed-up control system that generates a speed-up control signal in response to changes in the gain control signal from the associated digital system and, **the speed-up control system providing the speed-up control signal to the filter to adjust filter characteristics of the filter**".

In contrast, Saito discloses a variable gain amplifier, but NOT "a filter operative to filter an amplified signal of the amplifier and provide a filtered output signal" and NOT "a speed-up control system that generates a speed-up control signal in response to changes in the gain control signal from the associated digital system and, the speed-up control system providing the speed-up control signal to the filter to adjust filter characteristics of the filter". The Examiner admits this (Office Action dated February 23, 2005, page 4, lines 5-9).

The Examiner relies upon Medvid as teaching a filter operative to filter an amplified signal of the amplifier and to provide a filtered output signal and upon Stoter as teaching a speed up control system. Applicants respectfully counter that even if, arguendo, Medvid teaches a filter operative to filter an amplified signal of the amplifier and to provide a filtered output signal AND if Stoter discloses a speed up circuit, the speed up

control does NOT provide the speed up control signal "to a filter to adjust filter characteristics". Moreover, there is no teaching or suggestion anywhere in the references to provide Stoter's speed up control signal to a filter to adjust the filter characteristics, without the improper hindsight provided by Applicants' disclosure. Accordingly, all elements of Claim 11 are not taught or suggested by the Examiner's combination of references. The 35 U.S.C. 103(a) rejection of Claim 11 is overcome.

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. **The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.** In re Gordon, 733 F.2d at 902, 221 USPQ at 1127. Moreover, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985).

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Claim 16 depends from Claim 11 and is therefore allowable for the same reasons set forth above for the allowance of Claim 11.

Additionally, Claim 16 further defines the system of claim 11, by further comprising a **delay system operative to impose a delay associated with changes in the gain control signal and provide a corresponding delayed gain control signal to adjust**



**the gain of the variable gain amplifier.** In contrast, Saito discloses a plurality of automatic gain control means in which the gain control signal is timely issued and NOT delayed. The unique aspect of Saito is that the gain resulting from the gain control is extended or HELD (col. 8, lines 23-25) – NOT “a **delay system operative to impose a delay associated with changes in the gain control signal and provide a corresponding delayed gain control signal to adjust the gain of the variable gain amplifier**”, as required by Claim 16. Moreover, please note lines 25-30 where it mentions that there is a “predetermined time delay AFTER the gain control operation”. The Medvid and Stoter references, alone or in combination, do not overcome this omission in the Saito reference. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 16 is overcome.

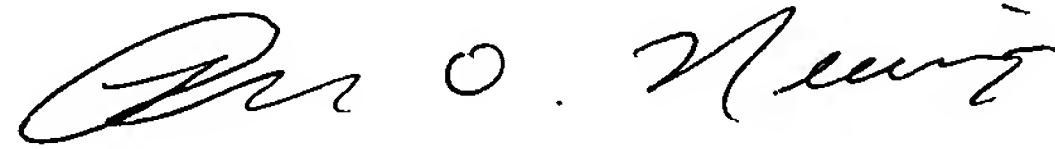
4) Claim 17 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (US 5,513,387) in view of Medvid et al (US 6,741,844) further in view of Stoter et al (US 20030026353) further in view of Cloke. Applicants respectfully traverse this rejection as follows:

Claim 17 further defines the system of claim 16 wherein the delay system comprises a low pass filter.

Claim 17 depends from Claim 16 and is therefore allowable for the same reasons set forth above for the allowance of Claim 16. Regardless of whether or not Cloke teaches a network in which comprises a delay and low pass filter, as suggested by the Examiner, Cloke does not overcome the deficiency of the combination of Saito, Medvid and Stoter discussed above, as applied to Claim 16. Accordingly, the 35 U.S.C. 103(a) rejection of Claim 17 is overcome.

Claims 18-23 stand allowed. Claims 1-17 stand allowable over the references of record. Applicants respectfully request allowance of the application as the earliest possible date.

Respectfully submitted,



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